

NOTICE OF RELEASE OF 'LANCER' PERENNIAL PEA
FOR CONSERVATION PLANTINGS

By

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ECOLOGICAL SCIENCES
Washington, D.C.

and

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

and

MICHIGAN DEPARTMENT OF TRANSPORTATION

The United States Department of Agriculture, Soil Conservation Service; the Michigan Department of Natural Resources; and the Michigan Department of Transportation announce the release of Lathyrus latifolius L., perennial pea, PI 477009 (Mich-430). The variety name will be 'Lancer'.

Perennial pea was introduced from Europe and escaped from cultivation. The seed of 'Lancer' was collected from a planting made by the Michigan Department of Natural Resources in the spring of 1951. The origin of that seed is unknown. Plants from this original planting were transplanted into a one-acre seed increase field at the Rose Lake Plant Materials Center (PMC) in 1978 and 1979. This seed increase field will be considered the breeders field.

'Lancer' perennial pea has broadly winged stems and petioles; leaves and stipules leathery and veiny; leaflets 2, lanceolate, oblong or oval, mostly 4-9 cm long; peduncles stiff, 4-10 flowered; flowers odorless, white to deep purple, about 2.5 cm long; and pods 6-9 cm long, with smooth dorsal suture; and seeds tuberculate and relatively large (8,000 seeds per pound). It has tendrils and can climb if given an opportunity.

The conservation use of 'Lancer' perennial pea is for inclusion in roadside seeding mixtures and in other critical area plantings where the objective includes beautification. 'Lancer' perennial pea is compatible with other legumes and fixes nitrogen, which increases ground cover density in erosion control plantings. It also has secondary value as wildlife food and cover, particularly for small mammals. It is also known to be utilized for food by pheasant and quail.

'Lancer' perennial pea was compared to seven other accessions of the same species from 1978 through 1983 at the Rose Lake PMC. During the establishment year, 'Lancer' had an excellent performance rating in seedling vigor, outranking all other accessions except one. Seed production was rated excellent, compared to the other accessions, throughout the years of evaluation. 'Lancer' was also more upright in growth form. The unextended vegetative growth measured 20 cm higher than the next highest ranking accession. The flower color varies from white to deep purple. The blooming period for 'Lancer' is long and has been observed to begin slightly earlier than for most other accessions evaluated. There are no known serious disease or insect problems involving this plant. Occasionally, downy mildew has been observed on the leaves.

In 1980, the Rose Lake PMC and the Big Flats PMC in New York state established similar plantings to determine the compatibility of various forbs, including 'Lancer', with standard erosion control mixes. The Rose Lake PMC, in cooperation with the Michigan Department of Transportation, selected suitable planting sites located on a highway reconstruction project south of Lansing, Michigan. The plantings were made in the fall of 1980. Poor stands of 'Lancer' existed at the end of the establishment year. In succeeding years, however, plant vigor improved and stand density increased.

'Lancer' perennial pea has been evaluated in field plantings throughout Michigan, Indiana, and Wisconsin since 1970. The field plantings were for critical area planting and wildlife area improvement. Few plantings failed, with most of the plantings being rated good to excellent. 'Lancer' performed well on soil textures ranging from silt loam to fine sands.

The Rig Flats PMC conducted extensive evaluations of 'Lancer' perennial pea. Summaries of these evaluations show 'Lancer's' bloom period to be **4-6** weeks, produces a large number of flowers, is typically robust, and is relatively easy to establish. Cultural studies at Big Flats PMC have also shown that 'Lancer' can be established when used as a part of an erosion control mix, provided the amount of rapidly growing grass is not excessive.

'Lancer' perennial pea is adapted to the Lakes States and most of the Northeast. It is likely to be adapted south to Virginia, Missouri, and Kansas as well.

Breeders seed is maintained at the Rose Lake PMC, East Lansing, Michigan. Foundation seed will be made available from the Rose Lake PMC to growers for the production of certified seed.

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June 8, 1984

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